none of the defects so often found with published conference proceedings. It also has a comprehensive index. The editors are to be congratulated on both these counts.

Coverage of the various sub-topics listed above is somewhat unequal with more emphasis on molecular biology, genetics, development and differentiation than on 'traditional' areas such as medical applications — but this is perhaps a fair reflection of the current emphasis in isozyme research. There is no doubt that isozyme systems have proved themselves as valuable tools for study of gene regulation and cellular differentiation, and this book provides a very good overview of achievements and prospects in these areas.

As might be expected the contributions are of two broadly different kinds. Some authors (the minority) give largely historical surveys of their subjects with little or no new material. These chapters are, in the main, well-written and will be of interest to the specialist in other areas of isozyme research who want to know what is going on elsewhere. The majority of the chapters on the other hand, report significant new experimental results and some authors, freed from the shackles usually imposed by referees of articles for the primary literature, indulge in interesting and useful speculation as to what their results might mean. It is one of the strengths of the volume that authors have been given the space (30 pages or more in some cases) to develop their ideas as well as to present new material.

In an introductory chapter Markert signals the development of a whole new direction in isozyme research provided by transgenic animals. Clearly the possibility now exists to create new systems by insertion of foreign genes into host chromosomes thus providing novel objects for physiological and developmental studies. Whether the use of the term isozyme is appropriate for such foreign proteins is debatable but the potential of the technology cannot be in doubt.

In summary, this is a book to which all 'isozymologists', as well as scientists working in related disciplines, will want to have access to. They should certainly put it on their library acquisition list since, unfortunately, most pockets will not be sufficiently deep to run to a personal copy.

S. Doonan

Cytochrome P-450 and Active Oxygen; By A.I. Archakov and G.I. Bachmanova; Taylor & Francis; Basingstoke, 1990; vi + 339 pages; £55.00

In view of the vast subject area, this represents an excellent reference book for anyone who wishes to remain up-to-date on the progress of current research into the cytochromes P-450 enzyme superfamily. It also provides a fascinating insight into the areas of cytochrome P450 research in the Soviet Union, much of which has hitherto remained virtually inaccessible to the western world. But this book is much more than that: it is a treatise on all of the important aspects of this fascinating and ubiquitous enzyme. The current status of cytochrome P-450 research is painstakingly recorded and categorized in a rational way which leads the reader through all the major facets of this exciting and rapidly developing field, which is of fundamental importance to those seriously interested in chemical metabolism and its regulation. Due to the expanding nature of cytochrome P-450 research, with more publications per annum than any other topic in science, it is essential that a major monograph on the latest developments is produced every few years. This book continues the already established sequence comprising the previous works on the subject by Sato and Omura (1978), Ruckpaul and Rein (1984) and Ortiz de Montellano (1986). As such, this publication is strongly recommended reading for all cytochrome P-450 specialists.

The book is subdivided into eleven chapters covering such aspects of the subject matter as the mechanisms of oxygen activation, genetic engineering, toxicity, induction, regulation, reconstituted systems, molecular organization and membrane topology, catalytic activity, physical properties and characteristics, and the isolation and purification of the various cytochromes P-450 from different biological sources. The text is well-written, though occasionally loses something in translation. It is unfortunate, however, that the new nomenclature of cytochrome P-450 proteins is not employed and one feels that a larger number of illustrative figures and tables would have enhanced the presentation of the considerable factual information. In conclusion, this monograph contains an extremely thorough and detailed treatment of the major aspects of cytochrome P-450 research both in breadth and depth, bringing together many apparently isolated pieces of information in such a way as to convey logically connected conceptual sequences which build into an integrated structure with great lucidity and clarity. This is a timely work of great importance written by two world experts in the field.

D.F.V. Lewis

Advanced Immunochemistry (Second Edition); By Eugene D. Day, Wiley-Liss; New York, 1990; xxiii + 693 pages; $120.00 (hardback) $59.50 (softback)

This is a monumental book: approximately 700 pages long with over 2000 references. The first edition (1972) was only about 450 pages in length and the increase in size underestimates the growth of the field in the intervening years.

The book is divided into two parts. Part 1 (Structure of